★ RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

#### **GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

ANY PVC LEADOUT CONDUIT CONTAINING MORE THAN ONE TWISTED PAIR OF LOOP LEAD WIRE SHALL BE 2".

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, INTO THE PULL BOX IN THE PAVEMENT, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE PULL BOX IN THE BASE COURSE, AND THE RELATED CONDUITS SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW CONCRETE PAVEMENT IS POURED.

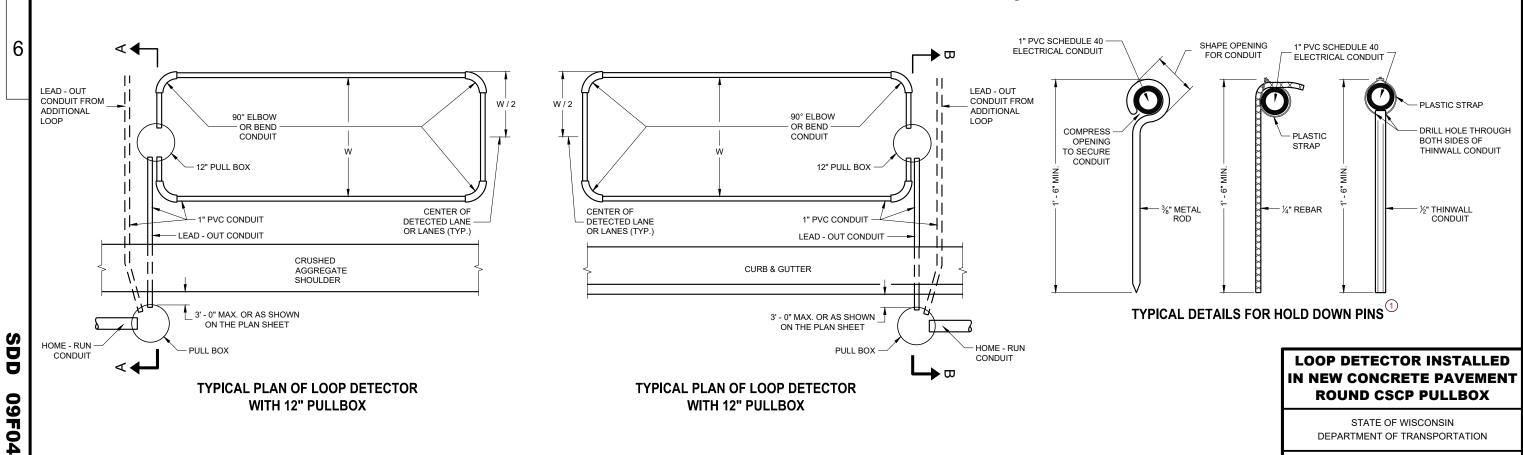
APPROVED

November 2018

DATE

12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.

1) HOLD DOWN PINS TO HOLD CONDUIT DURING POUR.



OD 09F04 - 05

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

# **Standard Detail Drawing 9F4**

November 30, 2018

# Loop Detector Installed in New Concrete Pavement Round CSCP Pullbox

#### References:

FDM15-5 Attachment 30.5 and 30.6 for conventional symbols

Standard Spec. 655 Electrical Wiring

Standard Spec. 675 Controllers and Detectors

### Bid items associated with this drawing:

ITEM NUMBER DES	<u>CRIPTION</u>	<u>UNIT</u>
652.0800 Cond	luit Loop Detector	LF
653.0100 - 0150 Pull E	Boxes Steel (inch)	EACH
653.0151 - 0179 Pull E	Boxes Non-Conductive (inch)	EACH
655.0700 Loop	Detector Lead In Cable	LF
655.0800 Loop	Detector Wire	LF

### Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE

NONE

### Other SDDs associated with this drawing:

SDD 9B2 Conduit SDD 9B4 Pull Box

SDD 9B16 Pull Box Non-Conductive

## **Design Notes:**

NONE

#### **Contact Person:**

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